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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/002,404	12/05/2001	Hyun Duk Cho	P-0311	1015

34610 7590 01/03/2007  
FLESHNER & KIM, LLP  
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CHANTILLY, VA 20153

EXAMINER
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SENF, BEHROOZ M

ART UNIT	PAPER NUMBER
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2621

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/03/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/002,404	<b>Applicant(s)</b> CHO ET AL.	
	<b>Examiner</b> Behrooz Senfi	<b>Art Unit</b> 2621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 04 October 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1,2,4-21,24,26-30 and 32-38 is/are pending in the application.
- 4a) Of the above claim(s) 3,22,23,25 and 31 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 9-21,24,26-30 and 32-38 is/are allowed.
- 6) ☒ Claim(s) 1,2,4,6 and 8 is/are rejected.
- 7) ☒ Claim(s) 5 and 7 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 February 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |                                                                                                            |                                                                                         |
|------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____                                                |

## **DETAILED ACTION**

### ***Response to Amendment***

1. Applicant's arguments filed 10/04/2006 have been fully considered but they are not persuasive.

#### **Response to remarks:**

Applicant asserts (remarks; page 16, lines 2 – 4) that, Cho and/or Wen do not teach or suggest that the inserted channel coding information relates to an index of a channel coding rate table (CCRT).

Examiner respectfully disagrees; examiner consider "the channel coding information relates to an index of a channel coding rate table" as the information that are being transmitted from the encoder to the decoder, in order for the decoder to use these information and properly perform the decoding process. In view of the above, in the video encoding/decoding process as taught by Cho; it is implies that the coding information; like, motion vector and/or motion compensation information, partition table (which consider as index table) and etc. are being transmitted from the encoder side, and in decoder side this information is used to properly decompress the video signal.

In view of the above, claims 1 – 2, 4, 6 and 8 are finally rejected for the same reason as set fourth in the last Office Action, mailed 04/06/2006. The rejections are being restated for applicant convenience.

Furthermore: Applicant by amending claims 9, 11, 14, 20, 24, 26 into independent form and incorporating the allowable subject matter as indicated in the last Office Action, mailed 04/06/2006 place the above claims in allowable condition.

Claims 3, 22 – 23, 25 and 31 have been canceled.

***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1 – 2, 4, 6 and 8 are rejected under 35 U.S.C. 102(e) as being anticipated by Cho et al (US 7,012,962).

Regarding claim 1, Cho '962 discloses, a video data coding/decoding apparatus comprising: an encoder (figs. 2 – 3, abstract) dividing a partition, partitioned by a data partitioning technique into certain blocks; channel-coding the divided block data and transmitting a bit-stream (fig. 1, channel coding 3); the encoder inserting channel coding information into the partitioned data (i.e. figs. 2-3, markers 12 and 14 and partition table 21) the channel coding information including size information of each of the plurality of partitions (fig. 3, partition table, which includes the size information of each partition, col. 3, lines 48 – 51, the length information for respective partitioned regions), wherein the inserted channel coding information relates to an index of a channel coding rate table (figs. 3 - 4, partition table 21, which consider as index table being used for coding and

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decoding purpose) and a decoder channel-decoding the bit stream received from the encoder so as to restore a video data (i.e. fig. 4, decoding part 32).

Regarding claim 2, Cho '962 discloses, wherein the encoder divides the partition into a plurality of blocks according to a predetermined block size (i.e. col. 2, lines 22 – 23).

Regarding claim 4, Cho '962 discloses, wherein the channel coding is performed in units of bytes (i.e. fig. 3, col. 4, lines 60 – 65).

Regarding claim 6, Cho '962 also discloses the encoder comprises: a variable length coder source-coding the video data (i.e. figs. 3 – 4, variable length coding part, col. 5, lines 43 – 45). As for the limitations of “partitioning it into a plurality of partitions, and dividing each partition into certain blocks, and a channel coder channel-coding the partition data of the divided block”, they have been analyzed and rejected with respect to claims 1 and 3 above. Cho also discloses a partition mixer mixing a partition table storing the size information of the plurality of partitions and the plurality of partition, so as to form the bit stream (i.e. figs. 3 and 4, variable length coding part and the channel coding part are combined to form a bit-stream, see col. 5, lines 43 – 60).

Regarding claim 8, the limitations as claimed are the decoding part of claim 6 above, which reads on (i.e. figs. 1 and 4, channel decoding part and source decoding part, which are being combined to produce the original data to display).

4. Claims 1 – 2 are rejected under 35 U.S.C. 102(e) as being anticipated by Wen et al (US 6,768,775).

Regarding claim 1, Wen '775 discloses, a video data coding/decoding apparatus (i.e. fig. 3, abstract lines 1 – 3), an encoder dividing a partition partitioned by a data partitioning technique into certain block (i.e. fig. 3, 30 and 32), channel coding the divided block data and transmitting a bit-stream (i.e. fig. 3, 32, 36, 34), the encoder inserting channel coding information into the partition data (i.e. fig. 3, elements 36 and 32, col. 3, lines 40 – 50, col. 5, lines 35 – 58), the channel coding information including size information of each of the plurality of partitions (i.e. col. 3, lines 41 – 45 and col. 4, lines 23 – 36) teaches, an additional information may be inserted into a bit region (MVDP bit region, LMVV bit region, DDP bit region), for example in the DDP bit region an 8-bit fixed length code is used, which is the size information of that region/partition, a decoder channel decoding the bit stream received from the encoder so as to restore a video data (i.e. fig. 5, decoder 60).

Regarding claim 2, Wen '775 discloses, encoder divides the partition into a plurality of blocks according to a predetermined block size (i.e. fig. 3, in as much as applicant has disclosed).

#### **Allowable Subject Matter**

5. Claims 9 – 21, 24, 26 – 30 and 32 - 38 are allowed over the prior art of the record.

Claims 5 and 7 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

6. The following is an examiner's statement of reasons for allowance:

The prior art of the record fails to anticipate or render obvious the following:

Re claim 31, the further limitation of avoiding a marker emulation; generating a window having less bits than the marker bit; checking whether a marker emulation has occurred between the partition data while sliding the generated window; and inserting a certain value at the very next portion of a portion which matches the window to avoid a marker emulation, when the marker emulation is generated between partition data;

Re claim 33, the further limitations of searching a marker while removing bits inserted to avoid a marker emulation from a received bit stream; demixing the bit stream to a plurality of partitions when a marker is discovered; computing a total bit amount, an information bit amount and a channel coding bit amount of each partitioned partition and channel-decoding the partition data according to an index of a channel coding rate table; and mixing the channel-decoded partitions, and performing a source decoding on the partitions so as to restore an original video data.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Claims 10, 12 – 13, 15 – 19, 21, 27 – 30, 32 and 34 – 38 are allowed with respect to dependency to independent allowable claims 9, 11, 14, 20, 26 and 33.

### ***Conclusion***

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

**Contact**

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Behrooz Senfi** whose telephone number is **(571) 272-7339**.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Mehrdad Dastouri** can be reached on **(571) 272-7418**.

**Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks

Washington, D.C. 20231

**Or faxed to:**

**(571) 273-8300**

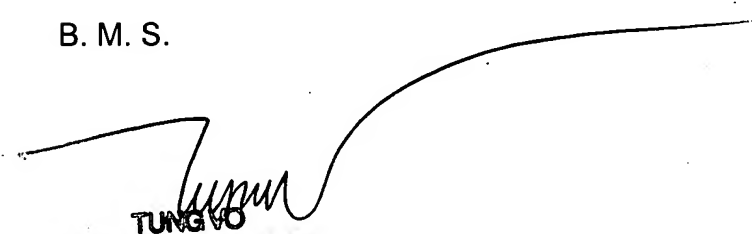
Hand-delivered responses should be brought to Randolph Building, 401 Dulany Street, Alexandria, Va. 22314.



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Any inquiry of a general nature or relative to the status of the application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (571) 272-6000.

B. M. S.



TUNG VO  
PRIMARY EXAMINER